This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently amended) A method for communicating data between a fiber optic data network and an electric power system, comprising:

communicating a first data signal comprising the data with the fiber optic data network;

converting between the first data signal and a second data signal;

routing the ~~second~~ data ~~signal~~;

communicating the second data signal with a transformer bypass device for communication with the electric power system; and

wherein the transformer bypass device is coupled to a medium voltage power line of the electric distribution power system and a low voltage power line of the electric power system.

2. (Original) The method of claim 1, wherein the first data signal is a fiber optic-based signal.

3. (Previously presented) The method of claim 1, wherein the first data signal is compliant with the Synchronous Optical Network standard.

4. (Previously presented) The method of claim 1, wherein a radio frequency signal is modulated by the second data signal.

5. (Previously presented) The method of claim 1, wherein the first data signal is received from the fiber optic data network.

6. (Original) The method of claim 1, wherein the first data signal is transmitted on the fiber optic data network.

7. (Previously presented) The method of claim 1, wherein the second data signal is received from the electric power system.

8. (Original) The method of claim 1, wherein the second data signal is transmitted on the electric power system.

9. (Canceled)

10. (Previously presented) The method of claim 1, wherein the electric power system includes a low-voltage network located within a customer premise.

11. (Canceled)

12. (Canceled)

13. (Previously presented) The method of claim 1, wherein the electric power system includes a high-voltage network.

14. (Original) The method of claim 1, further comprising converting the second data signal to a third data signal, wherein the third data signal is capable of being transmitted on a telecommunications network.

15. (Previously presented) The method of claim 14, wherein a power line interface device converts the second data signal to the third data signal.

16. (Original) The method of claim 14, wherein the telecommunications network is a customer premise telephone network.

17. (Original) The method of claim 14, wherein the telecommunications network is a customer premise coaxial cable network.

18. (Previously presented) The method of claim 1, wherein the second data signal is communicated with a power line interface device.

19. (Canceled)

20. (Previously presented) A device for converting data between a fiber optic data network and an electric power system, comprising:

a first interface port for communicating a first data signal with the fiber optic data network;

a second interface port for communicating a second data signal with the electric power system;

a fiber optic transceiver in communication with the first interface port;

a modem in communication with the fiber optic transceiver and the second interface port; and

a router in communication with the fiber optic transceiver and the modem.

21. (Previously presented) The device of claim 20, wherein the fiber optic transceiver converts a fiber optic data signal received at the first interface port to an electrical data signal.

22. (Previously presented) The device of claim 21, wherein the modem receives the electrical data signal and modulates a carrier signal with the electrical

data signal to form a first modulated data signal for communication to the electric power system.

23. (Previously presented) The device of claim 20, wherein the modem demodulates a modulated data signal received at the second interface port to produce a demodulated data signal for communication to the fiber optic transceiver.

24. (Previously presented) The device of claim 23, wherein the fiber optic transceiver converts the demodulated data signal to an optical signal for communication to the fiber optic data network.

25. (Canceled)

26. (Previously presented) The device of claim 20, wherein the second interface port is communicatively coupled to a transformer bypass device.

27. (Previously presented) The device of claim 22, wherein the modem demodulates a second modulated data signal received at the second interface port to produce a demodulated data signal for communication to the fiber optic transceiver.

28. (Previously presented) The device of claim 27, wherein the fiber optic transceiver converts said demodulated data signal to an optical signal for communication to the fiber optic data network.

29. (Previously presented) The device of claim 20, wherein the electric power system is a low-voltage network located within a customer premise.

30. (Previously presented) The device of claim 20, wherein the electric power system is a low-voltage network.

31. (Previously presented) The device of claim 20, wherein the electric power system is a medium-voltage network.

32. (Previously presented) The device of claim 20, wherein the electric power system is a high-voltage network.

33. (Previously presented) The device of claim 20, further comprising a conversion device to convert the second data signal to a third data signal, wherein the third data signal is capable of being transmitted on a telecommunications network.

34. (Original) The device of claim 33, wherein the telecommunications network is a customer premise telephone network.

35. (Original) The device of claim 33, wherein the telecommunications network is a customer premise coaxial cable network.

36. (Previously presented) A device for communicating data between a fiber optic data network that carries fiber optic data signals and an electric power system that carries electrical data signals, comprising:

a fiber optic transceiver in communication with the fiber optic data network;

a router in communication with the fiber optic transceiver; and

a modem in communication with the router and the electric power system.

37. (Original) The communication network of claim 36, further comprising a power line interface device in communication with the electric power system and a telecommunication network.

38. (Original) The communication network of claim 37, further comprising a premise data network in communication with the power line interface device.

39. (Previously presented) The communication network of claim 37, wherein the power line interface device is communicatively coupled to a telephone.

40. (Previously presented) The communication network of claim 36, wherein the modem communicates with the electric power system through a transformer bypass device.

41. (Previously presented) The communication network of claim 36, wherein the fiber optic transceiver communicates with the fiber optic data network using the Synchronous Optical Network standard.

42. (Canceled)

43. (Previously presented) The communication network of claim 36, wherein the modem is in communication with a network device.

44. (Original) The communication network of claim 43, wherein the network device includes at least one of the following: a telephone, a computer, a facsimile machine, a television, and a household appliance.

45. (Previously presented) The communication network of claim 36, wherein an electric transformer forms part of the electric power system.

46. (Previously presented) The communication network of claim 45, further comprising a power line bridge in communication with the electric power system and the modem, the power line bridge providing a path for data to bypass the electric transformer.

47. (Canceled)

48. (Canceled)

49. (Canceled)

50. (Previously presented) The communication network of claim 36, wherein the electric power system includes a low-voltage network located within a customer premise.

51. (Previously presented) The communication network of claim 50, wherein the router selects said low-voltage network from a plurality of low-voltage networks for transmission of data signals.

52. (Previously presented) The communication network of claim 36, wherein the electric power system includes a low-voltage network.

53. (Previously presented) The communication network of claim 52, wherein the router selects said low-voltage network from a plurality of low-voltage networks for transmission of data signals.

54. (Previously presented) The communication network of claim 36, wherein the electric power system includes a medium-voltage network.

55. (Previously presented) The communication network of claim 54, wherein the modem is coupled to the medium-voltage network.

56. (Previously presented) The communication network of claim 36, wherein the electric power system includes a high-voltage network.

57. (Previously presented) The communication network of claim 56, wherein the modem is coupled to the high-voltage network.

58. (Currently amended) A method for communicating data between a fiber optic data network and an electric power system, comprising:

receiving a first fiber optic data signal comprising the data with an optical transceiver;

generating a second data signal based on the first fiber optic data signal;

routing the ~~second~~ data ~~signal~~;

modulating a radio frequency signal with the second data signal to generate a first modulated data signal; and

transmitting the first modulated data signal to the electric power system.

59. (Previously presented) The method claim 58, further comprising:

receiving the first modulated data signal from the electric power system;

converting the received signal to a premise-based data signal; and

providing the premise-based data signal to a network device.

60. (Canceled)

61. (Previously presented) The method claim 58, further comprising:

receiving a second modulated data signal from the electric power system;

demodulating the second modulated data signal to provide a first demodulated data signal;

creating a second fiber optic data signal based on said first demodulated data signal; and

transmitting the second fiber optic data signal to the fiber optic data network.